REMARKS

These remarks are in response to the Office Action mailed January 2, 2008.

Claims 1, 4-5, 44-48 and 54 have been canceled without prejudice to Applicants'

right to prosecute the canceled subject matter in any divisional, continuation,

continuation-in-part or other application. Of the canceled claims, claims 6-8, 18-20

and 31-40 are directed to withdrawn subject matter as directed to a non-elected

invention. Applicants acknowledge the Examiner's statement as to allowable claims

13, 16, 17, 21-27 and 49-53. No new matter is believed to have been introduced.

REJECTIONS UNDER 35 U.S.C. §102 and §103

Claim 54 stand rejected under 35 U.S.C. §102(b) as allegedly anticipated by

Linford *et al.* (U.S. Patent No. 5,429,708). Claims 1, 4, 5 and 44-48 stand rejected

as allegedly unpatentable over Stengl *et al.* in view of Linford *et al.* Applicants

respectfully traverse these rejections.

The reactions and methods of the Linford *et al.* either alone or in combination

with Stengl *et al.* do not provide a silicon substrate comprising the elements set forth

in Applicants' claimed invention.

Applicants have provided evidence by Declaration, as well as evidence in the

specification, demonstrating that the methods of Linford *et al.* do not inherently

described a silicon substrate having the elements of Applicants' claimed invention.

For example, the specification at page 22, line 1 (Table 6) shows that an "Alcohol-

halogen solution" (e.g., a method of Linford *et al.*) provides silicon substrates having

carrier lifetimes and surface recombination velocities different than those produced

by "Alcohol-ferrocene solution" (Applicants' method). The Examiner is respectfully

directed to the last sentence of paragraph [0077] which states, "More of the silicon at the surface is bonded to the methoxy groups if a ferrocenium solution is used, and such surfaces produce longer lifetimes and lower surface recombination velocities." Linford *et al.* do not described such methodology and thus could not have obtained the silicon substrate characteristics as described by Applicants.

In addition, Applicants have previously provided a Declaration by Dr. Nate Lewis indicating that silicon substrates generated in peroxide and 1-octene does not provide a silicon substrate having Applicants characteristics. For example, producing a silicon substrate under alcohol-halogen techniques (*e.g.*, Linford *et al.*) provides a silicon substrate having different lifetimes and recombination velocities compared to a silicon substrate produced by alcohol-ferrocene as described by Applicants.

Accordingly, merely carrying out the method of Linford *et al.* do not provide silicon substrates the have Applicants' claimed characteristics. In fact, the data presented in Table 6 of the specification and in the Declaration provided on February 2006, demonstrate that Applicants' claimed invention does not necessarily flow from the teachings of Linford *et al.* Applicants respectfully submit that *inherency may not be established by probabilities or possibilities.* Applicants have provided data that demonstrates Applicants' invention does not "*necessarily*" flow from the teachings of Linford *et al.* As evidenced in the Declaration, attaching an organic layer to a silicon surface does not inherently result in a structure having improved electrical properties. In particular, the Declaration presents data showing that organic layers attached to a silicon surface actually do not result in the claimed invention as suggested by the Examiner. Thus, Linford *et al.* cannot anticipate the claimed invention.

Applicants believe that the foregoing amendments and remarks set forth

allowable subject matter. Accordingly, Applicants respectfully request withdrawal of

the rejections and allowance of the pending claims.

Respectfully submitted,

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Date: <u>January 25, 2008</u>   By: _____

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